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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/748,946 Filing Date: December 29, 2003 Appellant(s): GIBLIN ET AL.

Milton L. Honig For Appellant MAILED NOV 1 5 2006 GROUP 1700

EXAMINER'S ANSWER

This is in response to the appeal brief filed August 16, 2006 appealing from the Office action mailed July 3, 2006.

Application/Control Number: 10/748,946

Art Unit: 1772

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,843,540

HEYDARPOUR ET AL

12-1998

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4,068,663

D'ALESSANDRO

1-1978

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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 20 – 21, 23 and 27 – 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Heydarpour et al (U.S. Patent No. 5,843,540).

With regard to Claims 11, 20 and 27 - 28, Heydarpour et al disclose a container for flowable material (column 5, lines 27 - 33) comprising an outer layer (exterior layer; column 6, lines 45 - 51) comprising a metallocene polyethylene with density from 0.91 to 0.95 g/cm³ (column 6, lines 45 - 51) in the amount of 25 to 75% by weight, and of a homopolymer polyethylene (10 to 100 parts of the metallocene polyethylene and 0 to 90 parts of a polyethylene material, therefore a polyethylene homopolymer; column 6, lines 45 - 51) having a density greater than 0.957 g/cm³ (column 14, lines 10 - 12), and an inner layer (interior layer; column 6, lines 19 - 21) and a middle layer (core layer; column 6, lines 57 - 58); the middle layer is 99.9 microns in thickness, and the inner and outer layers are 20 microns in thickness (column 7, lines 5 - 10); the outer and inner layers therefore each comprise 5 + 20% of the total thickness of the wall of the container and the middle layer comprises 70 - 80% of the total thickness of the wall of the bottle; Heydarpour et al disclose that the container is recyclable (column 1, line 34) and is used by a consumer (column 1, lines 19 - 20) and Heydarpour et al therefore disclose a container

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which is completely recycled post consumer; the container therefore comprises a middle layer comprising 100% post consumer recycled resin; Heydarpour et al disclose the interchangeability of the container with a plastic bottle (the container is an alternative to a plastic bottle; column 12, lines 1-3), and Heydarpour et al therefore disclose a bottle having the layer structure; because Heydarpour et al disclose a bottle which is identical to the claimed bottle, the claimed aspect of the 25% transmittance of light in the visible spectrum being seen through the wall is inherent to Heydarpour et al.

With regard to Claim 21, Heydarpour et al disclose a middle layer comprising high density polyethylene (Heydarpour et al disclose a density greater than 0.930 g/cm^3 and disclose high density polyethylene as a polyethylene of the invention; column 10, lines 25 - 35 and column 13, lines 60 - 63); and disclose the use of additional middle layers (column 6, line 67); Heydarpour et al therefore disclose a middle layer comprising virgin high density polyethylene.

With regard to Claim 23, Heydarpour et al disclose the use of additional middle layers, as stated above, and therefore disclose the use of two additional middle layers; the inner and outer layers therefore each comprise 5 - 10% of the total thickness of the wall of the bottle.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 14 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heydarpour et al (U.S. Patent No. 5,843,540) in view of D'Alessandro (U.S. Patent No. 4,068,663).

Heydarpour et al disclose a bottle comprising an outer layer comprising 10% polyethylene by weight as discussed above. With regard to Claims 14 – 16, Heydarpour et al fail to disclose a bottle comprising an outer layer comprising polypropylene.

D'Alessandro discloses the interchangeability of polyethylene and polypropylene in the making of a bottle for the purpose of making a bottle for containment water (column 3, lines 4 – 9). One of ordinary skill in the art would therefore have recognized the advantage of providing for the polypropylene of D'Alessandro in Heydarpour et al, which comprises a bottle, depending on the desired containment of water of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time

Applicant's invention was made to have provided for polypropylene in Heydarpour et al in order to obtain a bottle for containment water as taught by D'Alessandro.

(10) Response to Argument

Appellant argues that Heydarpour et al teaches the non – recyclability of high density polyethylene jugs, and that Heydarpour et al therefore teach away from the recyclability of the plastic bottle of the claimed invention, because the bottle of the claimed invention is closer to a jug than to a pouch.

However, Heydarpour et al teach the recyclability of the structure which is disclosed by Heydarpour et al, which is the same chemically as the claimed structure, and Heydarpour et al

disclose a bottle having the claimed structure. Furthermore, structural features are not claimed by Appellant which would define the invention as being 'closer' to a jug than it is to some other container structure.

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Appellant also argues that Heydarpour et al utilize the word 'recyclable' rather than the word 'recycled,' and that Heydarpour et al therefore disclose the potential for recycling but not actual recycling; the container could, Appellant argues, be incinerated instead.

However, the teaching of recyclability is clearly for the recycling of the material, thus obtaining a material which is recycled. Furthermore, because the structure disclosed by Heydarpour et al is the same chemically as the claimed structure, it is unclear what differences would exist in the final product in Applicant's invention by using components which are post – consumer recycled instead of virgin, even if the components of Heydarpour et al are virgin.

Appellant also argues that if Heydarpour et al disclose recycling, the recycling is not necessarily used to newly manufacture a bottle; the recycling, Appellant argues, may be used to manufacture construction material, for example.

However, because Heydarpour et al disclose a material that is recyclable, Heydarpour et al disclose a material that is recyclable into another of the original article, which is a bottle, although there may be other forms into which the material is recyclable.

Appellant also argues that Heydarpour et al do not disclose at least 25% by weight post – consumer recycled resin in the middle layer.

However, as stated in the rejection, Heydarpour et al disclose recyclability (column 1, line 34) and use by a consumer (column 1, lines 19 – 20); Heydarpour et al therefore disclose a middle layer a comprising 100% post consumer recycled resin.

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Appellant also argues that post – consumer resins are known to impart strength, but it is surprising that recycled resin in the middle layer in the claimed amount did not substantially interfere with light transmittance.

However, as stated above, Heydarpour et al disclose post – consumer recycled resin in the amount of at least 25% by weight in the middle layer. Furthermore, Appellant provides no evidence of the strength which is imparted by the claimed post recycled resins, and Appellant does not claim component of the resin such as a pigment which would necessarily interfere with light transmittance.

Appellant also argues that the skilled technician would be hesitant to incorporate any significant amount of recycled resin because it has no appreciable light transmittance; post – consumer recycled plastics, Appellant argues, are mixtures of many materials and subject to impurities which could adversely affect light transmission properties, and are therefore analogous to a rotten onion which ruins a good stew.

However, as stated above, Appellant does not claim components of the resin which would necessarily interfere with light transmittance. Appellant also does not claim impurities which could adversely affect light transmission properties or produce an absence of light transmittance, or definitively state that post consumer recycled resin contains impurities, although Appellant states that the resin is subject to impurities.

Appellant also argues that recycled resin, almost by definition, is a mixture of plastics; clarity in a material, Appellant argues, is not enhanced by components that are unlike each other, because light dispersion occurs from non – uniformity.

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However, as stated above, Appellant has provided no evidence that light dispersion occurs from non – uniformity in all post – consumer recycled plastics; in particular, if each component of a virgin mixture of resins is a component that causes no light dispersion, it is unclear why the post – consumer recycled mixture would cause light dispersion.

Appellant also argues that Official Notice should be taken that recycling degrades light properties relative to virgin materials.

However, as stated above, it is not clear why post – consumer recycled resins necessarily have degraded properties light properties or have no light transmittance. It is noted again that, as stated above, because Heydarpour et al discloses the chemical components of the claimed invention, it is unclear what advantages are gained in Applicant's invention by using components which are post – consumer recycled instead of virgin.

Appellant also argues that D'Alessandro teaches a bottle comprising high density polyethylene or polypropylene, but D'Alessandro does not teach a blend of high density polyethylene and polypropylene.

However, as stated in the rejection, D'Alessandro discloses the interchangeability of polyethylene and polypropylene in the making of a bottle for the purpose of making a bottle for containment water (column 3, lines 4-9); one of ordinary skill in the art would therefore have recognized the advantage of providing for polypropylene in Heydarpour et al as well as the existing polyethylene, depending on the desired containment of water of the end product.

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11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Marc A. Patterson

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